



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

6300 Georgetown Pike  
McLean, Virginia 22101-2296

Subject: **INFORMATION:** "Ramp Signing for Trucks,"  
Publication No. FHWA-RD-91-042

Date: May 7, 1993

From: Director, Office of Safety and Traffic  
Operations Research and Development  
Director, Office of Highway Safety

Reply to  
Attn. of: HSR-20

To: Regional Federal Highway Administrators

Distributed with this memorandum is the subject research report intended for other researchers and highway engineers concerned with truck safety on interchange ramps.

A series of laboratory studies were conducted to identify specific sign elements, either words or symbols, and specific sign formats that most effectively warn truck drivers about potentially dangerous ramps. Laboratory studies were also conducted to test truckers' understanding, preference, and relative visibility of the most promising sign formats.

Three field tests were conducted at two interchange ramp sites, one at the cloverleaf interchange ramp at Interstate I-95/US 17 in Virginia and the other two tests at the interchange ramp at Interstates I-70/I-81 in Maryland. Testing was carried out in stages progressing from a passive mode to an active mode which consisted of a tipping truck sign with flashing beacons that were activated by the experimenter unbeknown to the truck drivers as they enter the ramp.

Statistically, the treatment had no operational effect in reducing the truckers speed. This was in spite of the fact that in laboratory studies truckers have a high level of understanding regarding the truck rollover problem and the meaning of the truck tipping sign.

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R. Clarke Bennett

  
Lyle Saxton

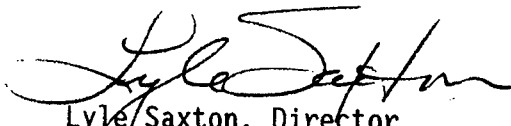
Attachment

## FOREWORD

This report presents the results of a research study addressing methods for treating interchange ramps that are prone to cause high center of gravity vehicles to lose control and overturn. Laboratory tests were conducted to identify specific sign elements and to format the various sign elements into a meaningful message. The most promising sign formats were then tested for understanding, preference, and relative visibility by truckers. Field tests of the "best" sign were conducted at two interchange ramp sites, one at the cloverleaf interchange ramp I-95/US 17 in Virginia and the other at the interchange ramp at Interstates I-70/I-81 in Maryland.

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A handwritten signature in dark ink, appearing to read 'Lyle Saxton', is written over the printed name.

Lyle Saxton, Director  
Office of Safety and Traffic Operations  
Research and Development

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